

CLAIMS

1. A method for generating a congestion indicator, comprising:
 - 2 determining an outerloop threshold as a function of a desired threshold,
measuring a congestion metric;
 - 4 comparing the congestion metric to the desired threshold; and
updating the outer loop threshold in response to comparing the
measured congestion metric to the desired threshold.
2. The method as in claim 1, wherein the congestion metric is a Rise-Over-
Thermal measurement.
3. The method as in claim 1, further comprising:
 - 2 Comparing the congestion metric to the outerloop threshold; and
transmitting a congestion indicator in response to comparing the
4 congestion metric to the outerloop threshold.
4. The method as in claim 1, wherein updating the outerloop threshold further
comprises:
 - 2 subtracting a first value Δ from the outerloop threshold in response to a
4 first result of comparing the congestion metric to the desired
threshold; and
6 subtracting a second value δ from the outerloop threshold in response to
a second result of comparing the congestion metric to the desired
8 threshold.
5. The method as in claim 4, wherein a ratio of Δ to δ corresponds to a
probability of exceeding the desired threshold of the congestion metric.
6. In a wireless communication system, an apparatus, comprising:
 - 2 congestion metric measurement unit operative measure a congestion
metric of the wireless system; and

4 outerloop threshold adjustment unit operative to determine an outerloop
 threshold as a function of a desired threshold.

7. The apparatus as in claim 6, further comprising:

2 a comparator coupled to the congestion metric measurement unit and the
outerloop threshold adjustment unit, operative to determine a next
4 congestion indicator in response to comparing a measured
congestion metric to the outerloop threshold.

8. The apparatus as in claim 6, further comprising:

2 a second comparator coupled to the congestion metric measurement unit
and the outerloop threshold adjustment unit, operative to compare
4 the measured congestion metric to a desired threshold, wherein
the outerloop threshold adjustment unit adjusts the outerloop
6 threshold in response to the second comparator.

9. The apparatus as in claim 8, wherein the outerloop threshold adjustment unit comprises:

first means for adjusting the outerloop threshold by subtracting a first value Δ from the outerloop threshold in response to a first result of comparing the congestion metric to the desired threshold; and

second means for adjusting the outerloop threshold by subtracting a second value δ from the outerloop threshold in response to a second result of comparing the congestion metric to the desired threshold.

10 wherein a ratio of Δ to δ corresponds to a probability of exceeding the desired threshold of the congestion metric.

10. The apparatus as in claim 9, wherein the first means is a set of
2 computer-readable instructions stored on a computer-readable storage
unit, and the second means is a second set of computer-readable
4 instructions stored on the computer-readable storage unit.

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- 2 11. The apparatus as in claim 9, wherein the outerloop threshold adjustment unit initializes the outerloop threshold to the desired threshold.
- 2 12. The apparatus as in claim 9, wherein the outerloop threshold adjustment unit determines the outerloop threshold having a predetermined margin with respect to the desired threshold.

TO: 2020-02-26 14:26:00